



SANYO Semiconductors

DATA SHEET

2SK2624ALS

N-Channel Silicon MOSFET

General-Purpose Switching Device Applications

Features

- Low ON-resistance.
- Low Q_g.
- Ultrahigh-speed switching.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings		Unit
Drain-to-Source Voltage	V _{DSS}			600	V
Gate-to-Source Voltage	V _{GSS}			±30	V
Drain Current (DC)	I _D			3.5	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%		12	A
Allowable Power Dissipation	P _D	T _c =25°C		2.0	W
Channel Temperature	T _{ch}			25	W
Storage Temperature	T _{stg}			150	°C
Avalanche Energy (Single Pulse) *1	E _{AS}			-55 to +150	°C
Avalanche Current *2	I _{AV}			49	mJ
				3	A

*1 V_D=50V, L=10mH, I_{AV}=3A

*2 L≤10mH, single pulse

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V(BR)DSS	I _D =1mA, V _{GS} =0V	600			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _D =600V, V _{GS} =0V			1.0	mA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±30V, V _D =0V			±100	nA
Cutoff Voltage	V _{GS(off)}	V _D =10V, I _D =1mA	3.5		5.5	V

Marking : K2624

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2SK2624ALS

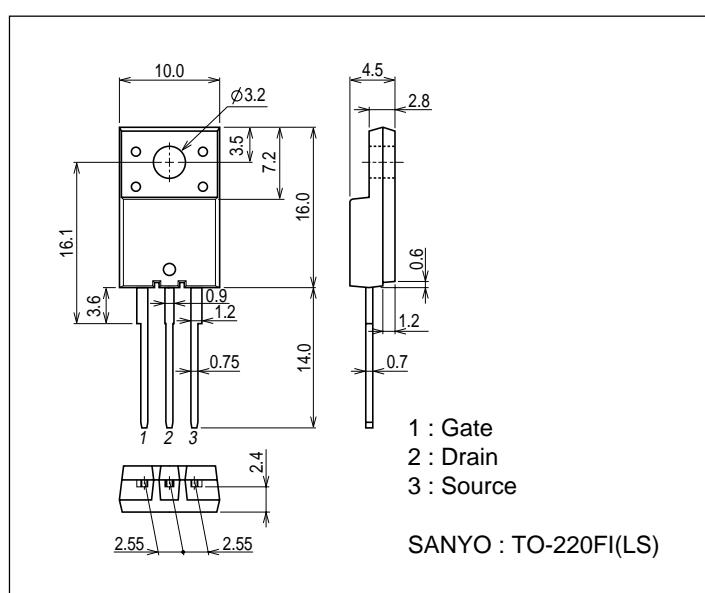
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Transfer Admittance	yfs	V _{DS} =10V, I _D =1.8A	1.0	2.0		S
Static Drain-to-Source On-State Resistance	R _{D(S)} (on)	I _D =1.8A, V _{GS} =15V		2.0	2.6	Ω
Input Capacitance	C _{iss}	V _{DS} =20V, f=1MHz		550		pF
Output Capacitance	C _{oss}	V _{DS} =20V, f=1MHz		165		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =20V, f=1MHz		85		pF
Total Gate Charge	Q _g	V _{DS} =200V, I _D =3A, V _{GS} =10V		15		nC
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		17		ns
Rise Time	t _r	See specified Test Circuit.		17		ns
Turn-OFF Delay Time	t _{d(off)}	See specified Test Circuit.		40		ns
Fall Time	t _f	See specified Test Circuit.		22		ns
Diode Forward Voltage	V _{SD}	I _S =3A, V _{GS} =0V		0.98	1.2	V

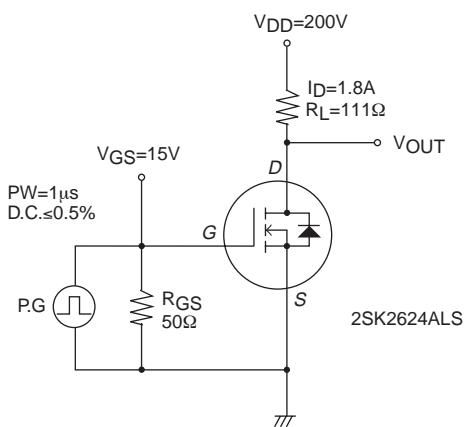
Package Dimensions

unit : mm (typ)

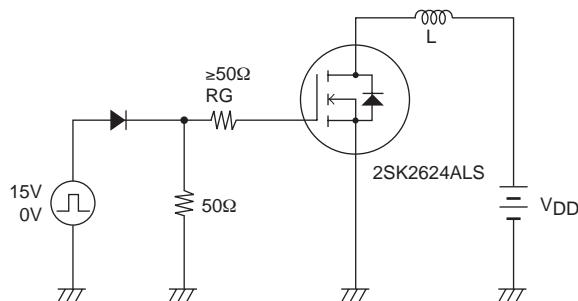
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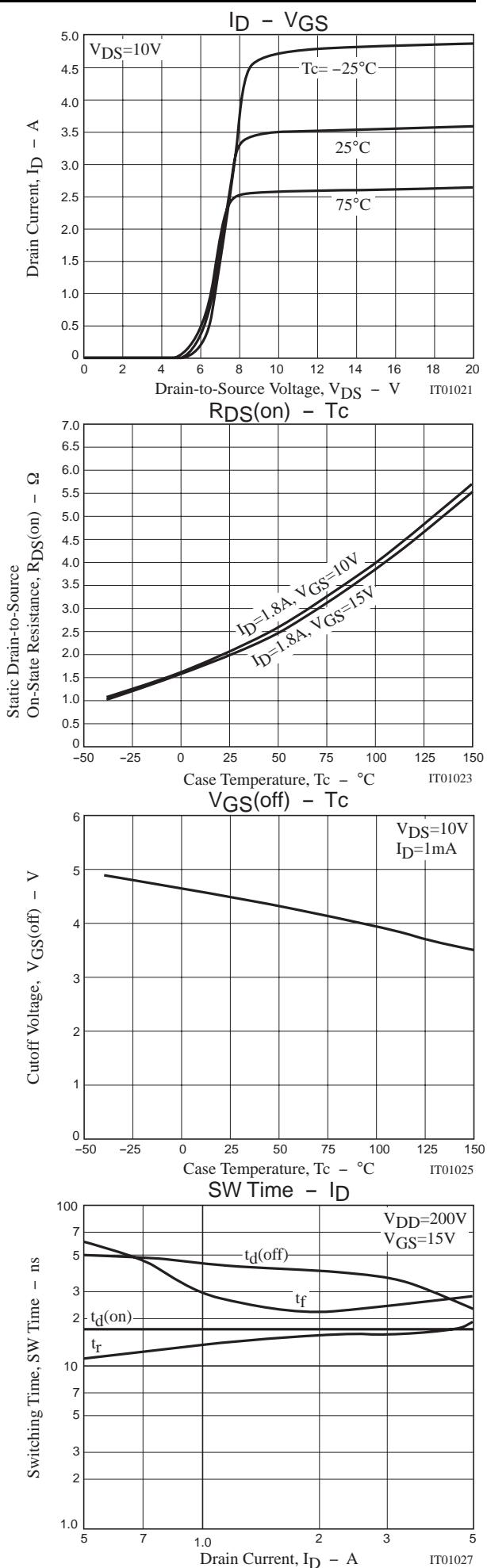
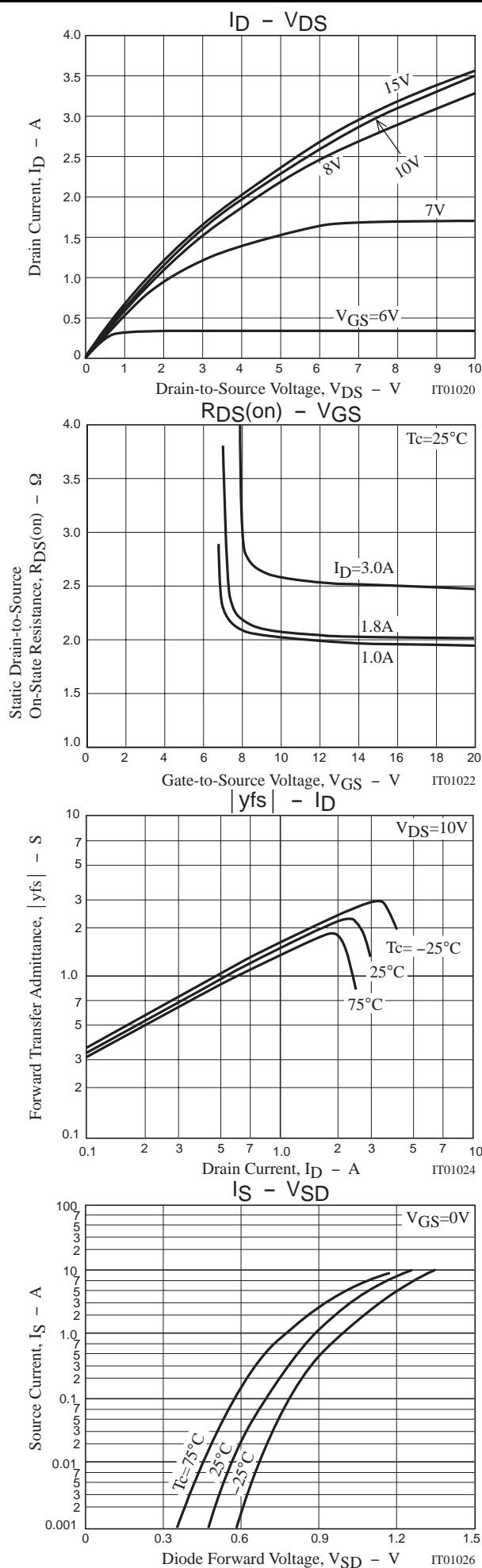
Switching Time Test Circuit



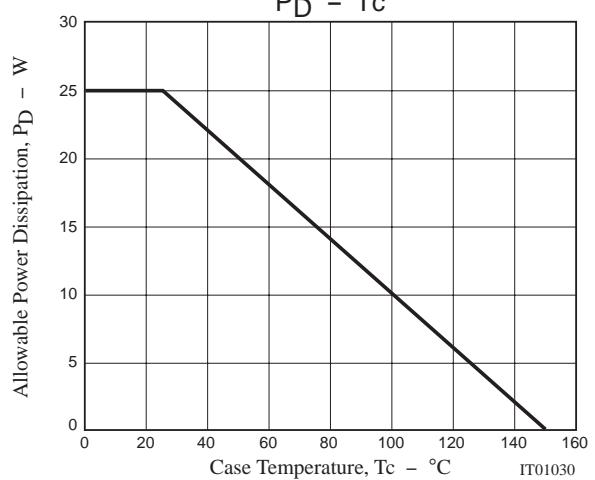
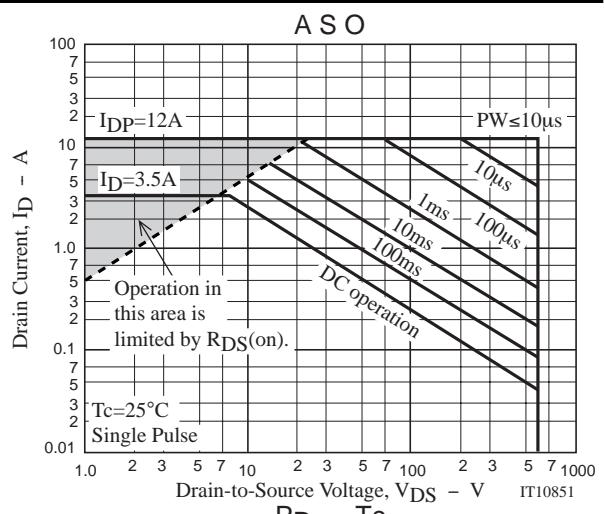
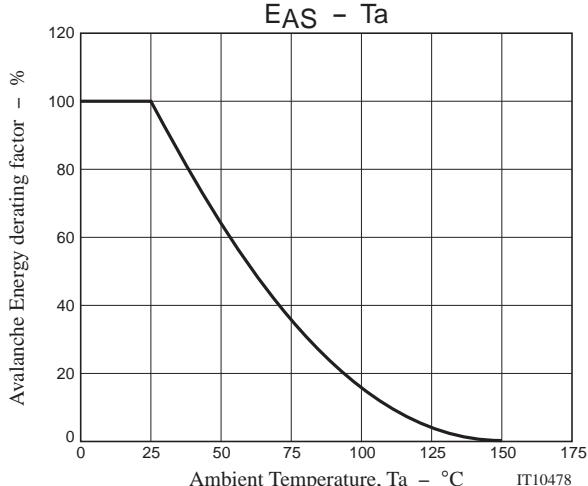
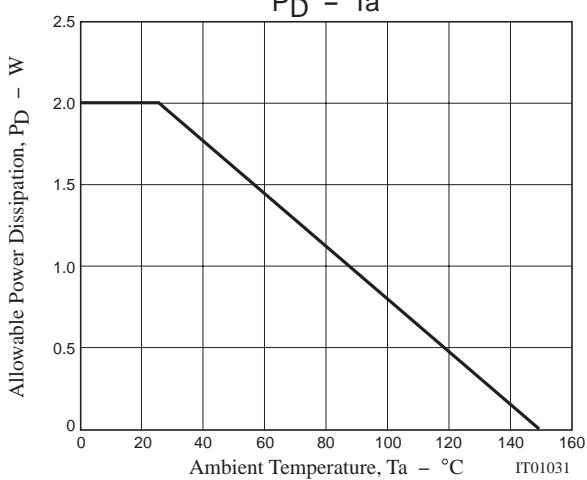
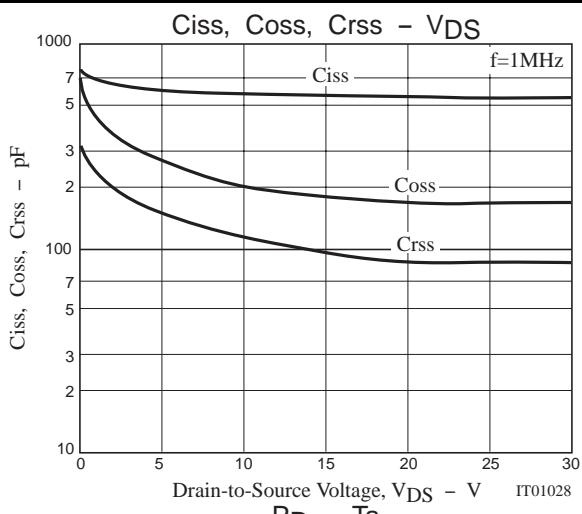
Avalanche Resistance Test Circuit



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Note on usage : Since the 2SK2624ALS is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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